# **Section 3. Departure Procedures**

# 4-3-1. DEPARTURE TERMINOLOGY

Avoid using the term "takeoff" except to actually clear an aircraft for takeoff or to cancel a takeoff clearance. Use such terms as "depart," "departure," or "fly" in clearances when necessary.

REFERENCE-

FAAO 7110.65, Takeoff Clearance, Para 3-9-9. FAAO 7110.65, Cancellation of Takeoff Clearance, Para 3-9-10.

# 4-3-2. DEPARTURE CLEARANCES

Include the following items in IFR departure clearances:

#### NOTE-

When considered necessary, controllers or pilots may initiate read backs of a clearance. Some pilots may be required by company rule to do so.

- a. Always include the airport of departure when issuing a departure clearance for relay to an aircraft by an FSS, dispatcher, etc.
- **b.** Clearance Limit. Specify the destination airport when practicable, even though it is outside controlled airspace. Issue short range clearances as provided for in any procedures established for their use.
  - c. Departure Procedures.
- 1. Specify direction of takeoff/turn or initial heading/azimuth to be flown after takeoff as follows:
- (a) Locations with Airport Traffic Control Service-Specify these items as necessary.
- (b) Locations without Airport Traffic Control Service, but within a Class E surface area- specify these items if necessary. Obtain/solicit the pilot's concurrence concerning these items before issuing them in a clearance.

#### NOTE-

Direction of takeoff and turn after takeoff can be obtained/solicited directly from the pilot, or relayed by an FSS, dispatcher, etc., as obtained/solicited from the pilot.

- (c) At all other airports- Do not specify direction of takeoff/turn after takeoff. If necessary to specify an initial heading/azimuth to be flown after takeoff, issue the initial heading/azimuth so as to apply only within controlled airspace.
- 2. Where only textually described instrument departure procedures have been published for a location

and pilot compliance is necessary to insure separation, include the procedure as part of the ATC clearance.

# EXAMPLE-

"Depart via the (airport name) (runway number) departure procedure."

#### NOTE-

IFR takeoff minimums and departure procedures are prescribed for specific airports/runways and published in a tabular form supplement to the NOS instrument approach procedure chart and appropriate FAA Form 8260. These procedures are identified on instrument approach procedure charts with a symbol:



3. Compatibility with a procedure issued may be verified by asking the pilot if items obtained/solicited will allow him/her to comply with local traffic pattern, terrain, or obstruction avoidance.

PHRASEOLOGY-FLY RUNWAY HEADING.

DEPART (direction or runway).

TURN LEFT/RIGHT.

WHEN ENTERING CONTROLLED AIRSPACE (instruction), FLY HEADING (degrees) UNTIL REACHING (altitude, point, or fix) BEFORE PROCEEDING ON COURSE.

FLY A (degree) BEARING/AZIMUTH FROM/TO (fix) UNTIL (time),

or

UNTIL REACHING (fix or altitude),

and if required,

BEFORE PROCEEDING ON COURSE.

#### EXAMPLE-

"Verify right turn after departure will allow compliance with local traffic pattern," or "Verify this clearance will allow compliance with terrain or obstruction avoidance."

# NOTE-

If a published IFR departure procedure is not included in an ATC clearance, compliance with such a procedure is the pilot's prerogative.

# 4. DP's:

(a) Assign a DP (including transition if necessary). Assign a PDR or the route filed by the pilot, only when a DP is not established for the departure route to be flown, or the pilot has indicated that he/she does not wish to use a DP.

#### PHRASEOLOGY-

(DP name and number) DEPARTURE.

(DP name and number) DEPARTURE, (transition name) TRANSITION.

# EXAMPLE-

- "Stroudsburg One Departure."
- "Stroudsburg One Departure, Sparta Transition."
- "Stroudsburg One RNAV Departure."

#### NOTE-

If a pilot does not wish to use a DP issued in an ATC clearance, or any other DP published for that location, he/she is expected to advise ATC.

(b) If it is necessary to assign a crossing altitude which differs from the DP altitude, repeat the changed altitude to the pilot for emphasis.

#### PHRASEOLOGY-

(DP name) DEPARTURE, EXCEPT (revised altitude information). I SAY AGAIN (revised altitude information).

#### EXAMPLE-

"Stroudsburg One Departure, except cross Quaker at five thousand. I say again, cross Quaker at five thousand."

"Astoria Two RNAV Departure, except cross Astor waypoint at six thousand. I say again, cross Astor waypoint at six thousand."

(c) Specify altitudes when they are not included in the DP.

# PHRASEOLOGY-

(DP name) DEPARTURE. CROSS (fix) AT (altitude).

### EXAMPLE-

"Stroudsburg One Departure. Cross Jersey intersection at four thousand. Cross Range intersection at six thousand."

"Engle Two RNAV departure. Cross Pilim waypoint at or above five thousand. Cross Engle waypoint at or above seven thousand. Cross Gorge waypoint at niner thousand."

d. Route of flight. Specify one or more of the following:

- 1. Airway, route, course, heading, azimuth, arc, or vector.
- 2. The routing a pilot can expect if any part of the route beyond a short range clearance limit differs from that filed.

# PHRASEOLOGY-

EXPECT FURTHER CLEARANCE VIA (airways, routes, or fixes.)

e. Altitude. Use one of the following in the order of preference listed:

#### NOTE-

Turbojet aircraft equipped with afterburner engines may occasionally be expected to use afterburning during their climb to the en route altitude. When so advised by the pilot, the controller may be able to plan his/her traffic to accommodate the high performance climb and allow the pilot to climb to his/her planned altitude without restriction.

- 1. Assign the altitude requested by the pilot.
- 2. Assign an altitude, as near as possible to the altitude requested by the pilot, and
- (a) Inform the pilot when to expect clearance to the requested altitude unless instructions are contained in the specified DP, or
- (b) If the requested altitude is not expected to be available, inform the pilot what altitude can be expected and when/where to expect it.

#### NOTE-

- 1. 14 CFR Section 91.185, says that in the event of a two-way radio communication failure, in VFR conditions or if VFR conditions are encountered after the failure, the pilot shall continue the flight under VFR and land as soon as practicable. That section also says that when the failure occurs in IFR conditions the pilot shall continue flight at the highest of the following altitudes or flight levels for the route segment being flown:
- a. The altitude or flight level assigned in the last ATC clearance received.
- b. The minimum altitude (converted, if appropriate, to minimum flight level as prescribed in 14 CFR Section 91.121(c)) for IFR operations. (This altitude should be consistent with MEA's, MOCA's, etc..)
- c. The altitude or flight level ATC has advised may be expected in a further clearance.
- 2. If the expected altitude is the highest of the preceding choices, the pilot should begin to climb to that expected altitude at the time or fix specified in the clearance. The choice to climb to the expected altitude is not applicable if the pilot has proceeded beyond the specified fix or if the time designated in the clearance has expired.

#### PHRASEOLOGY-

CLIMB AND MAINTAIN (the altitude as near as possible to the pilot's requested altitude). EXPECT (the requested altitude or an altitude different from the requested altitude) AT (time or fix),

and if applicable,

(pilot's requested altitude) IS NOT AVAILABLE.

#### EXAMPLE-

1. A pilot has requested flight level 350. Flight level 230 is immediately available and flight level 350 will be available at the Appleton zero five zero radial 35 mile fix. The clearance will read:

"Climb and maintain flight level two three zero. Expect flight level three five zero at Appleton zero five zero radial three five mile fix."

2. A pilot has requested 9,000 feet. An altitude restriction is required because of facility procedures or requirements. Assign the altitude and advise the pilot at what fix/time the pilot may expect the requested altitude. The clearance could read:

"Climb and maintain five thousand. Expect niner thousand one zero minutes after departure."

3. A pilot has requested 17,000 feet which is unavailable. You plan 15,000 feet to be the pilot's highest altitude prior to descent to the pilot's destination but only 13,000 feet is available until San Jose VOR. Advise the pilot of the expected altitude change and at what fix/time to expect clearance to 15,000 feet. The clearance will read:

"Climb and maintain one three thousand. Expect one five thousand at San Jose. One seven thousand is not available."

#### REFERENCE-

FAAO 7110.65, Abbreviated Departure Clearance, Para 4-3-3. FAAO 7110.65, Initial Heading, Para 5-8-2.

# 4-3-3. ABBREVIATED DEPARTURE CLEARANCE

a. Issue an abbreviated departure clearance if its use reduces verbiage and the following conditions are met:

# REFERENCE-

FAAO 7110.65, IFR-VFR and VFR-IFR Flights, Para 4-2-8.

1. The route of flight filed with ATC has not been changed by the pilot, company, operations officer, input operator, or in the stored flight plan program prior to departure.

#### NOTE-

A pilot will not accept an abbreviated clearance if the route of flight filed with ATC has been changed by him/her or the company or the operations officer before departure. He/she is expected to inform the control facility on initial radio contact if he/she cannot accept the clearance. It is the responsibility of the company or operations officer to inform the pilot when they make a change.

2. All ATC facilities concerned have sufficient route of flight information to exercise their control responsibilities.

#### NOTE-

The route of flight information to be provided may be covered in letters of agreement.

3. When the flight will depart IFR, destination airport information is relayed between the facilities concerned prior to departure.

# EXAMPLE-

1. A tower or flight service station relay of destination airport information to the center when requesting clearance:

"Request clearance for United Four Sixty-One to O'Hare."

2. A center relay to the tower or flight service station when initiating a clearance:

"Clearance for United Four Sixty-One to O'Hare."

#### NOTE:

Pilots are expected to furnish the facility concerned with destination airport information on initial radio call-up. This will provide the information necessary for detecting any destination airport differences on facility relay.

- **4.** The assigned altitude, according to the provisions in para 4-3-2, Departure Clearances, subpara e, is stated in the clearance.
- b. If it is necessary to modify a filed route of flight in order to achieve computer acceptance due, for example, to incorrect fix or airway identification, the contraction "FRC," meaning "Full Route Clearance Necessary," or "FRC/(fix)," will be added to the remarks. "FRC" or "FRC/(fix)" must always be the first item of intra-center remarks. When "FRC" or "FRC/(fix)" appears on a flight progress strip, the controller issuing the ATC clearance to the aircraft shall issue a full route clearance to the specified fix, or, if no fix is specified, for the entire route.

#### EXAMPLE-

"Cleared to Missoula International Airport, Chief Two Departure to Angley; direct Salina; then as filed; maintain one seven thousand."

# NOTE-

Changes, such as those made to conform with traffic flows and preferred routings, are only permitted to be made by the pilot (or his/her operations office) or the controller responsible for initiating the clearance to the aircraft.

c. Specify the destination airport in the clearance.

d. When no changes are required in the filed route, state the phrase: "Cleared to (destination) airport, (DP and DP transition, as appropriate); then, as filed." If a DP is not assigned, follow with "As filed." Specify the assigned altitude; and, if required, add any additional instructions or information.

#### PHRASEOLOGY-

CLEARED TO (destination) AIRPORT;

and as appropriate,

(DP name and number) DEPARTURE, AS FILED.

MAINTAIN (altitude); (additional instructions or information).

If a DP is not assigned,

CLEARED TO (destination) AIRPORT AS FILED. MAINTAIN (altitude);

and if required,

(additional instructions or information).

#### EXAMPLE-

"Cleared to Reynolds Airport; David Two RNAV Departure, Kingham Transition; then, as filed. Maintain niner thousand. Expect flight level four one zero, one zero minutes after departure."

"Cleared to Reynolds Airport as filed. Maintain niner thousand. Expect flight level four one zero, one zero minutes after departure."

# NOTE-

- 1. DP's are excluded from "cleared as filed" procedures.
- 2. If a pilot does not wish to accept an ATC clearance to fly a DP, he/she is expected to advise ATC or state "NO DP" in his/her flight plan remarks.
- e. When a filed route will require revisions, the controller responsible for initiating the clearance to the aircraft shall either:
  - 1. Issue a FRC/FRC until a fix; or
- 2. If it reduces verbiage, state the phrase: "Cleared to (destination) airport, (DP and DP transition, as appropriate), then as filed, except..." Specify the necessary revision, then the assigned altitude; and if required, add any additional instructions or information. If a DP is not assigned, state: "Cleared to (destination) airport as filed, except..." Specify the

necessary revision, the assigned altitude; and if required, add any additional instructions or information.

# PHRASEOLOGY-

CLEARED TO (destination) AIRPORT;

and as appropriate,

(DP name and number) DEPARTURE,

(transition name) TRANSITION; THEN,

AS FILED, EXCEPT CHANGE ROUTE TO READ (amended route portion).

MAINTAIN (altitude);

and if required,

(additional instructions or information).

If a DP is not assigned,

CLEARED TO (destination) AIRPORT AS FILED,

EXCEPT CHANGE ROUTE TO READ (amended route portion).

MAINTAIN (altitude);

and if required,

(additional instructions or information).

# EXAMPLE-

"Cleared to Reynolds Airport; South Boston One Departure; then, as filed, except change route to read South Boston Victor Twenty Greensboro. Maintain eight thousand, report leaving four thousand."

"Cleared to Reynolds Airport as filed, except change route to read South Boston Victor Twenty Greensboro. Maintain eight thousand, report leaving four thousand."

"Cleared to Reynolds Airport via Victor Ninety-one Albany, then as filed. Maintain six thousand."

f. In a nonradar environment specify one, two, or more fixes, as necessary, to identify the initial route of flight.

#### EXAMPLE-

The filed route of flight is from Hutchins V10 Emporia, thence V10N and V77 to St. Joseph. The clearance will read: "Cleared to Watson Airport as filed via Emporia, maintain Seven Thousand."

g. Do not apply these procedures when a pilot requests a detailed clearance or to military operations conducted within ALTRV, stereo routes, operations above FL 600, and other military operations requiring special handling.

# NOTE-

Departure clearance procedures and phraseology for military operations within approved altitude reservations, military operations above FL 600, and other military operations requiring special handling are contained in separate procedures in this order or in a LOA, as appropriate.

#### REFERENCE-

FAAO 7110.65, ALTRV Clearance, Para 4-2-7. FAAO 7110.65, Military Operations Above FL 600, Para 9-3-11.

# 4-3-4. DEPARTURE RESTRICTIONS, CLEARANCE VOID TIMES, HOLD FOR RELEASE, AND RELEASE TIMES

Assign departure restrictions, clearance void times, hold for release, or release times when necessary to separate departures from other traffic or to restrict or regulate the departure flow.

#### REFERENCE-

FAAO 7110.65, Overdue Aircraft, Para 10-3-1. FAAO 7110.65, Traffic Restrictions, Para 10-4-1. FAAO 7110.65, Traffic Resumption, Para 10-4-3.

- a. Clearance Void Times.
- 1. When issuing clearance void times at airports not served by control towers, provide alternative instructions requiring the pilots to advise ATC of their intentions no later than 30 minutes after the clearance void time if not airborne.
- 2. The facility delivering a clearance void time to a pilot shall issue a time check.

#### PHRASEOLOGY-

CLEARANCE VOID IF NOT OFF BY (clearance void time),

and if required,

IF NOT OFF BY (clearance void time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.

TIME (time in hours, minutes, and the nearest quarter minute).

- b. Hold For Release (HFR).
- 1. "Hold for release" instructions shall be used when necessary to inform a pilot or a controller that a

departure clearance is not valid until additional instructions are received.

#### REFERENCE-

P/CG Term- Hold for Release.

2. When issuing hold for release instructions, include departure delay information.

#### PHRASEOLOGY-

(Aircraft identification) CLEARED TO (destination) AIRPORT AS FILED, MAINTAIN (altitude),

and if required,

(additional instructions or information).

HOLD FOR RELEASE, EXPECT (time in hours and/or minutes) DEPARTURE DELAY.

3. When conditions allow, release the aircraft as soon as possible.

#### PHRASEOLOGY-

To another controller,

(aircraft identification) RELEASED.

To a flight service specialist,

ADVISE (aircraft identification) RELEASED FOR DEPARTURE.

To a pilot at an airport not served by a control tower,

(aircraft identification) RELEASED FOR DEPARTURE.

- c. Release Times.
- 1. Release times shall be issued to pilots when necessary to specify the earliest time an aircraft may depart.

# NOTE-

A release time is a departure restriction issued to a pilot (either directly or through authorized relay) to separate a departing aircraft from other traffic.

2. The facility issuing a release time to a pilot shall include a time check.

# PHRASEOLOGY-

(Aircraft identification) RELEASED FOR DEPARTURE AT (time in hours and/or minutes),

and if required,

IF NOT OFF BY (time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.

TIME (time in hours, minutes, and nearest quarter minute).

d. When controlled departure time (CDT) procedures are in effect, the departure terminal shall, to the extent possible, plan ground movement of aircraft destined to the affected airport(s) so that flights are sequenced to depart as near as possible to the assigned EDCT, but no earlier than 5 minutes prior to the EDCT or 15 minutes after the assigned EDCT. If the aircraft is unable to meet these parameters, contact the overlying TMU for a revised EDCT.

#### NOTE-

(Trust & Verify) EDCT times are revised for changing conditions en route or at affected airport(s). Terminal controllers use of aircraft reported EDCT for departure sequencing should be verified with the ATCSCC or overlying TMU prior to or after aircraft departure.

#### 4-3-5, DELAY SEQUENCING

When aircraft elect to take delay on the ground before departure, issue departure clearances to them in the order in which the requests for clearance were originally made if practicable.

# 4-3-6. FORWARD DEPARTURE DELAY INFORMATION

Inform approach control facilities and/or towers of anticipated departure delays.

# 4-3-7. COORDINATION WITH RECEIVING FACILITY

a. Coordinate with the receiving facility before the departure of an aircraft if the departure point is less than 15 minutes flying time from the transferring facility's boundary unless an automatic transfer of data between automated systems will occur, in which case, the flying time requirement may be reduced to 5 minutes or replaced with a mileage from the boundary parameter when mutually agreeable to both facilities.

#### NOTE-

A greements requiring additional time are encouraged between facilities that need earlier coordination. However, when agreements establish mandatory radar handoff procedures, coordination needs only be effected in a timely manner prior to transfer of control.

#### REFERENCE-

FAAO 7110.65, Chapter 5, Section 4, Transfer of Radar Identification, Application, Para 5-4-1.

**b.** The actual departure time or a subsequent strip posting time shall be forwarded to the receiving facility

unless assumed departure times are agreed upon and that time is within 3 minutes of the actual departure time

# 4-3-8. VFR RELEASE OF IFR DEPARTURE

When an aircraft which has filed an IFR flight plan requests a VFR departure through a terminal facility, FSS, or air/ground communications station:

a. After obtaining, if necessary, approval from the facility/sector responsible for issuing the IFR clearance, you may authorize an IFR flight planned aircraft to depart VFR. Inform the pilot of the proper frequency and, if appropriate, where or when to contact the facility responsible for issuing the clearance.

# PHRASEOLOGY-

VFR DEPARTURE AUTHORIZED. CONTACT (facility) ON (frequency) AT (location or time if required) FOR CLEARANCE.

b. If the facility/sector responsible for issuing the clearance is unable to issue a clearance, inform the pilot, and suggest that the delay be taken on the ground. If the pilot insists upon taking off VFR and obtaining an IFR clearance in the air, inform the facility/sector holding the flight plan of the pilot's intentions and, if possible, the VFR departure time.

# 4-3-9. FORWARDING DEPARTURE TIMES

#### TERMINAL

Unless alternate procedures are prescribed in a letter of agreement or automatic departure messages are being transmitted between automated facilities, forward departure times to the facility from which you received the clearance and also to the terminal departure controller when that position is involved in the departure sequence.

#### NOTE-

- 1. Letters of agreement prescribing assumed departure times or mandatory radar handoff procedures are alternatives for providing equivalent procedures.
- 2. The letters "DM" flashing in the data block signify unsuccessful transmission of a departure message.

#### REFERENCE

FAAO 7210.3, Automatic Acquisition/Termination Areas, Para 11-2-6.